

REMARKS

Claims 1, 3-10 and 12-16 are pending. Claims 2 and 11 are canceled. Reconsideration of the application is requested.

§ 112 Rejections

Claims 1, 3-10 and 12-16 stand rejected under 35 USC § 112, first paragraph, as failing to comply with the written description requirement.

The Office Action states, the “claim(s) contains subject matter which was not described in the specification in such a way as to reasonable convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” See page 2, ¶2. Applicants respectfully disagree. Applicants assert that one of ordinary skill in the art would recognize a polymer to have a unimodal distribution absent a teaching otherwise. For example, bimodal (or multimodal) distributions for polyethylene are obtained by “blending two or more unimodal polymers having a different molecular weight” or using a “multiphase polymerization process” wherein the “reactors are in series so that the polymerization started in the first reactor continues in the second one”. See U.S. Pat. No. 5,494,965, col. 1 line 64 to col. 2, line 32. Further, according to the MPEP, “[i]f applicant amends the claims and points out where and/or how the originally filed disclosure supports the amendment(s), and the examiner finds that the disclosure does not reasonably convey that the inventor had possession of the subject matter of the amendment at the time of the filing of the application, the **examiner has the initial burden** of presenting evidence or reasoning to explain why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims.” See MPEP 2163.II.A, emphasis added.

Applicants submit that support for “unimodal fluoropolymer” can be found, for example, in the Materials Used table and Examples 1-6 of the specification as filed. See Amendment and Affidavit submitted October 12, 2007. The Office Action states, that “[w]hile the affidavit shows some of the polymers used in the examples are unimodal there is no support for the claim limitation.” See page 2, ¶3. Applicants respectfully disagree. As indicated in the response and affidavit filed October 12, 2007, support for “unimodal” can be found in the Materials Used table listed on page 8 of the application as originally filed. PPA1, PP1A, PP2, PP2A, PP3, and PP3A

all contain a unimodal molecular weight fluoropolymer. *See* affidavit submitted October 12, 2007, ¶11.

In summary, Applicants submit that the rejection of claims 1, 3-10 and 12-16 under 35 USC § 112, first paragraph, is not warranted. The rejection should be withdrawn and the claims allowed.

103 Rejections

Claims 1, 3-10 and 12-16 are rejected under 35 USC § 103(a) as being unpatentable over Dillon et al., U.S. Patent No. 6,277,919, (herein referred to as the '919 patent) because each of the claimed ingredients is allegedly discussed and suggested to be used in combination with one another in the '919 patent.

Applicants respectfully disagree. In view of the foregoing, Applicants submit that the present application is patentable over the cited art.

The Office Action states, "[i]t is not understood what the 'standard processing aid system' is in the example." *See* page 3, ¶7. As disclosed in the present application, "a standard processing aid system is recognized as containing the same components, the same specifically thermoplastic hydrocarbon polymer, the same poly(oxyalkylene) polymer, with a fluoropolymer of 60% by weight of vinylidene fluoride and 40% by weight of [sic] hexafluoropropylene under the similar testing methods, equipment and conditions." *See* page 6, lines 15-19. As further disclosed in the pending application, "the fluoropolymer processing aid, when blended with a thermoplastic hydrocarbon polymer to form a melt processable composition, achieves an extrudate exhibiting no melt defects at a lower level of fluoropolymer processing aid when compared to a standard processing aid system." *See* page 2, lines 8-11. As disclosed on page 13, lines 4-5 of the pending application, FX-5920A is a standard fluoropolymer processing additive.

The Office Action further states, "[t]he art acknowledges the unimodal polymers and a mentioned disadvantage does not negate their obviousness." *See* page 3, ¶8. Applicants respectfully disagree. "A prior art reference that 'teaches away' from the claimed invention is a significant factor to be considered in determining obviousness; however, 'the nature of the teaching is highly relevant and must be weighed in substance.'" *See* MPEP 2145.X.D.1. The

'919 patent and the pending application are **both directed to a fluoropolymer processing additive** to improve melt processing. *See* Abstracts. Thus, Applicants assert that the '919 patent teaching away from unimodal polymers, for example, "when unimodal fluoroplastics are used as polymer processing additive, they do not perform as well as similar multimodal fluoroplastics", is highly relevant and should be given weight. *See* col. 11, lines 34-36.

Claim 1 is patentable for at least the reasons stated above. Independent claims 7, 10 and 15 are rejected under the same reasoning as the Patent Office rejection of claim 1. Based upon the above-presented reasoning with respect to claim 1, independent claims 7, 10, and 15 should also be found patentable over the cited art. Claims 3-6, 8-9, 12-14, and 16 each add additional features to claims 1, 7, 10 or 15. Claims 1, 7, 10, and 15 are patentable for the reasons given above. Thus, claims 3-6, 8-9, 12-14, and 16 are likewise patentable.

In view of the foregoing, Applicants submit that the present application is in condition for allowance. Reconsideration and allowance of the pending claims at an early date is solicited. If issues remain, the Examiner is invited to contact the Applicants' representative at the telephone number provided below.

Respectfully submitted,

10 Apr 2008

Date

By: /Julie A. Lapos/

Julie A. Lapos, Reg. No.: 61,885

Telephone No.: 651-736-0297

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833

JL/kjr